

Soil and Water Remediation, Groundwater/Vadose Zone (RL-0030)

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EM-21 Workshop

Overview

This section addresses Project Baseline Summary (PBS) RL-0030, *Soil and Water Remediation Groundwater/Vadose Zone*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of December 2005.

Notable Accomplishments

Well Drilling: No additional wells for Calendar Year 2006 were completed during December. The current count is eight of the fifteen TPA-required wells are done. Drilling started on two of the six wells to be drilled for the 200-UP-1 Operable Unit on December 12, 2005. Fifty feet of casing was installed for geophysical logging of a contaminated interval in one of the wells. The other well was drilled to a total depth of 379 feet, with all samples collected. Well construction started December 29, 2005. One additional well to help characterize groundwater contamination near the T Tank Farm is nearing completion. Contracts for the remaining wells have been placed to maintain the drilling program ahead of schedule.

Cleaning up Chromium Along the River: Chromium concentrations continue to decline in the extraction/compliance wells at the 100-H Area. All of these wells are below 20 parts per billion (ppb) with the exception of three. The concentrations in these wells are around 30 ppb. Recent aquifer tube sampling (samples taken right on the river shore) shows that the hexavalent chromium is below 20 ppb. Some of the water that is treated at the pump and treat facility in the 100-H Area comes from the 100-D Area. Due to the extremely cold conditions in early December, the transfer line carrying the water for treatment froze up when some of the extraction wells had problems and went out of service. The lines froze within four hours. The D-Area transfer was returned to service on December 26, 2005.

Cleaning up Strontium-90 Along the River: A flow meter/vertical velocity profile test at two new wells (N-122 and N-123) drilled for the 100-NR-2 apatite sequestration barrier work was conducted on December 7-8, 2005. Freezing conditions complicated operation of test equipment, but the objectives of the initial characterization of the test zones were met. Initial findings from the test suggest it may be necessary to design the barrier injection wells so that the Hanford portion of the contaminant zone can be injected separately from the underlying Ringold soil layer. Confirmation sampling and analysis for dissolved oxygen and ferrous iron were also made during the pumping for the flow test at 100-NR-2. All dissolved iron concentrations were less than the detection limit (10 ug/L). A small amount of oil sheen was observed floating on the surface of one of the 55 gallon drums used for purgewater containment at Well N-123. Other than this minor observance, no evidence of diesel impact in the treatment zone area was observed.

FY 2006 Funds vs. Spend Forecast (\$M)

	Projected FY 2006 Funding	FY 2006 Fiscal Year Spend Forecast	Variance
Soil & Water Remediation, Groundwater/Vadose Zone	\$ 46.5	\$ 48.2	\$ -1.6

FY 2006 Schedule/Cost Performance (\$M)

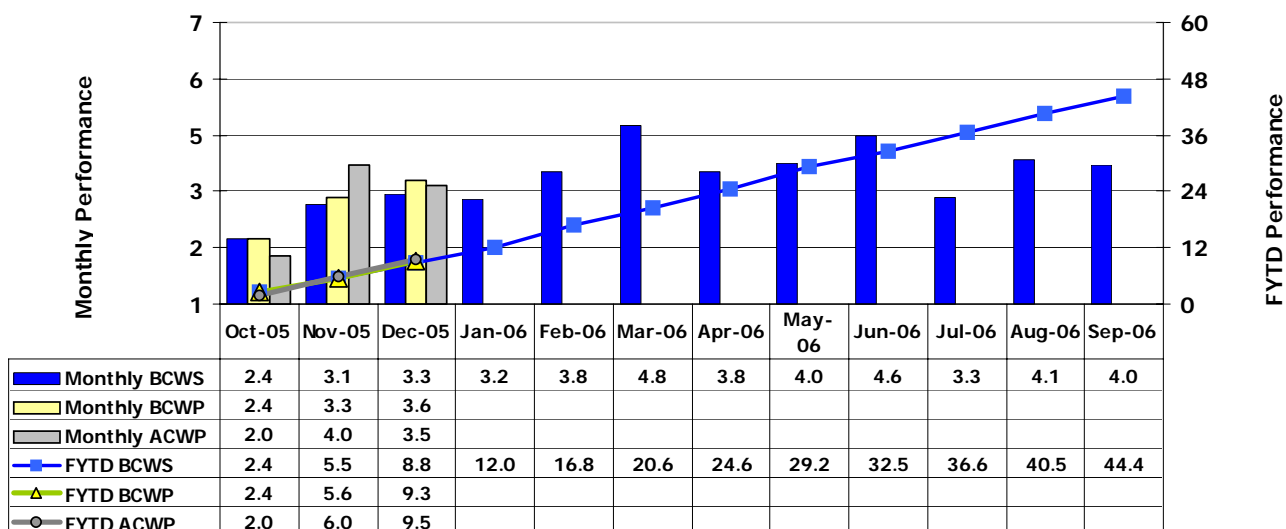
	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
Soil & Water Remediation, Groundwater/ Vadose Zone	\$8.8	\$9.3	\$9.5	\$0.4	5.1%	-\$0.2	-2.3%	\$44.4

Numbers are rounded to the nearest \$0.1M and include the Closure Services allocation.

Schedule Performance (\$0.4M/5.1%). Variance within threshold; no explanation required.

Cost Performance (-\$0.2M/-2.3%). Variance within threshold; no explanation required.

Performance Analysis FYTD and Monthly (\$M)



Milestone Achievement

PBS	MSN	Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
RL-0030	M-24-57G	Install a Cumulative of 45 Wells by December 31, 2005	RL	12/31/05	08/16/05		COMPLETE
RL-0030	M-24-57J	Install a Cumulative of 60 Wells by December 31, 2006	RL	12/31/06		07/31/06	
RL-0030	M-15-48A	Submit Draft A 200-ZP-1 CERCLA Remedial Investigation Report to EPA	RL	05/31/06		05/31/06	